

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/736,001	12/15/2003	John D. Richter	14012-053001/50-03-034	2963
26230 7590 06/07/2007 FISH & RICHARDSON P.C. P.O. BOX 1022 MINNEAPOLIS, MN 55440-1022			EXAMINER	
			COLAN, GIOVANNA B	
WINNEAI OLIS, WIN 33440-1022			ART UNIT	PAPER NUMBER
•			2162	
			MAIL DATE	DELIVERY MODE
			06/07/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
	10/736,001	RICHTER, JOHN D.				
Office Action Summary	Examiner	Art Unit				
·	Giovanna Colan	2162				
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet v	rith the correspondence address				
A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING D - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailinearned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUN 36(a). In no event, however, may a will apply and will expire SIX (6) MO e, cause the application to become A	ICATION. reply be timely filed NTHS from the mailing date of this communication. BANDONED (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on <u>02 A</u>	pril 2007.					
2a) ☐ This action is FINAL . 2b) ☑ This	This action is FINAL . 2b)⊠ This action is non-final.					
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under E	Ex parte Quayle, 1935 C.	J. 11, 453 O.G. 213.				
Disposition of Claims						
4) ☐ Claim(s) 1 - 23 is/are pending in the application 4a) Of the above claim(s) is/are withdrays 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1 - 23 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or	wn from consideration.					
Application Papers						
9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) acc Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Example 11.	epted or b) objected to drawing(s) be held in abeya tion is required if the drawing	nce. See 37 CFR 1.85(a). g(s) is objected to. See 37 CFR 1.121(d).				
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority application from the International Burea * See the attached detailed Office action for a list	ts have been received. Is have been received in a Irity documents have been It (PCT Rule 17.2(a)).	Application No n received in this National Stage				
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	Paper No	Summary (PTO-413) (s)/Mail Date Informal Patent Application 				

Art Unit: 2162

DETAILED ACTION

1. This action is issued in response to applicant filed request for continued examination (RCE) on 04/02/2007.

- 2. Claims 1-2, 7, 10-13, 15, 18-21, and 23 have been amended. No claims were added. No claims were canceled.
- 3. Claims 1 23 are pending in this application.

Response to Arguments

4. Applicant's arguments with respect to amended claims 1 – 2, 7, 10 – 13, 15, 18 –
 21, and 23 have been considered but are moot in view of the new ground(s) of rejection.

Continued Examination Under 37 CFR 1.114

5. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/11/2006 has been entered.

Application/Control Number: 10/736,001

Art Unit: 2162

Page 3

Claim Rejections - 35 USC § 112

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claims 1 – 23 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The limitation including "previous accessed items" recited in claims 1, 4, 5, 10, 12, 13, 18, 19, 20, and 23 is not clearly described in the specification.

Any claim not specifically addressed, above, is being rejected as incorporating the deficiencies of a claim upon which it depends.

Claim Rejections - 35 USC § 103

- 8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. Claims 1, 3 – 10, 12 – 20, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Win et al. (Win hereinafter) (US Patent No. 6,182,142 B1, issued: January 30, 2001) in view of Joshi et al. (Joshi hereinafter) (US Patent Pub App. No. 2002/0091798 A1, filed: February 26, 2001).

Regarding Claims 1, and 10, Win discloses an article comprising a machinereadable medium storing instructions operable to cause one or more machines to perform operations comprising:

analyzing a plurality of database access statements that were issued for an application in use (Col.2, lines 28 - 33, Win¹) to determine accessed items and types of access for the application (Col.2, lines 31 - 34, Win²)

However, Win does not explicitly disclose that such plurality access statements were issued during use to determine previous access items and types of access. On the other hand, Joshi discloses access statements that were issued for an application during use to determine previous accessed items and types of access for the application (Fig. 30, Page 17, [0193], lines 1 – 19, Joshi).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the Joshi's teachings to the system of Win. Skilled

¹ Wherein examiner interprets the step of controlling access, particularly by receiving access information and identifying resources authorized (as disclosed by Win) as the step of analyzing the database access statements as claimed

statements as claimed.

Wherein the resources correspond to the accessed items claimed; and the roles correspond to the type of access claimed.

artisan would have been motivated to do so, as suggested by Joshi (Page 1 and 17, [0016] and [0193], lines 13 – 17 and 7 – 19; respectively, Joshi), to be able to customize the resource being accessed for the user accessing the resource by, for example, determining whether the authentication scheme associated with the requested resource has been previously cached, and further determining the type of challenge method for authentication. In addition, both of the references (Win and Joshi) teach features that are directed to analogous art and they are directed to the same field of endeavor, such as, databases management systems, authorization, and authentication. This close relation between both of the references highly suggests an expectation of success.

Furthermore, the combination of Win in of Joshi discloses:

developing a role for the application based on the previous accessed items and types of access for the application (Col.2, lines 35 – 47, Win³; and Fig. 30, Page 17, [0193], lines 14 – 19; Joshi), wherein when the application is in use by a user, the developed role for the application allows the user database access (Col. 2, lines 39 – 40 and 47 – 49, Win; and Fig. 30, Page 17, [0193], lines 14 – 19; "...If the challenge scheme was not found in step 1122, authentication event handler 512 loads the authentication rule associated with the requested resource from Directory Server 36...", Joshi).

Regarding Claim 3, the combination of Win in view of Joshi discloses a method wherein the database access statements comprise Structured Query Language (SQL)

³ Wherein the step of defining the roles corresponds to the step of developing a role claimed.

queries (Col. 7, lines 9 - 11, Win).

Regarding Claims 4, and 12, the combination of Win in view of Joshi discloses an article wherein the previous accessed items and types of access include objects accessed (Col. 2, lines 31 – 33, the resources, Win; Fig. 30, Page 17, [0193], lines 1 – 19, Joshi) and operations performed on the objects (Col. 2, lines 39 – 40, to use the resources, Win).

Regarding Claims 5, and 13, the combination of Win in view of Joshi discloses an article wherein developing a role comprises determining permissions for the application based on the previous accessed items and types of access (Col. 3, lines 34 – 44, Win; and Fig. 30, Page 17, [0193], lines 1 – 19, Joshi).

Regarding Claims 6, and 14, the combination of Win in view of Joshi discloses an article wherein the instructions are further operable to cause one or more machines to perform operations comprising determining which of a set of users are authorized to use the application (Col. 3, lines 13 – 14, Win).

Regarding Claims 7, and 15, the combination of Win in view of Joshi discloses an article wherein the instructions are further operable to cause one or more machines to perform operations comprising:

determining whether a user request to establish an application session has been detected (Figure 5B, item 516, Col. 10, lines 29 – 34, a login attempt, Win);

finding the role for the application (Figure 5C, item 520 and 522, Col. 10, lines 57 – 63, Win); and

assigning the role to a user (Col.13, lines 32 – 34, Win).

Regarding Claims 8, and 16, the combination of Win in view of Joshi discloses an article wherein detecting a user request to establish an application session comprises determining if a user is authorized to use the application (Col. 13, lines 34 – 36, Win).

Regarding Claims 9, and 17, the combination of Win in view of Joshi discloses an article wherein the instructions are further operable to cause one or more machines to perform operations comprising:

detecting an end of the application session (Col.9 and 10, lines 45 – 47 and 39 – 42; respectively, Win); and

if an end of the application session is detected (Col.10, lines 39 - 42, Win), disabling the assigned role for the user (Col. 10, lines 42 - 45, Win).

Regarding Claim 18, the combination of Win in view of Joshi discloses a database security analyzer comprising:

a communication interface operable to receive a plurality of database access statements that were issued for an application during use (Figure 9, item 918, Communication Interface, Col. 27, lines 17 – 31, Win);

a memory operable to store the issued database access statements (Figure 9, item 906, Main Memory, Col. 26, lines 8 – 15, Win); and

a processor (Figure 9, item 904, processor, Col. 26, lines 36 – 42, Win) operable to develop a role for the application based on the previously issued database access statements for the application (Col. 2, lines 35 – 38, Win⁴; and Fig. 30, Page 17, [0193], lines 1 – 19, Joshi), wherein when the application is in use by a user, the developed role for the application allows a user database access (Col. 2, lines 39 – 40 and 47 – 49, Win).

Regarding Claim 19, the combination of Win in view of Joshi discloses an analyzer wherein developing a role comprises:

analyzing the database access statements to determine previous accessed items and types of access for the application (Col. 2, lines 31 – 34, Win⁵; and Fig. 30, Page 17, [0193], lines 1 – 19, Joshi);

determining permissions for the application based on the previous accessed items and types of access for the application (Col. 3, lines 34 - 37, Win; and Fig. 30, Page 17, [0193], lines 1 - 19, Joshi); and

⁴ Wherein the step of defining the roles corresponds to the step of developing a role claimed.

⁵ Wherein the resources correspond to the accessed items claimed; and the roles correspond to the type of access claimed.

developing a role associated with the application based on the determined permissions (Col. 2, lines 35 - 38, Win⁶).

Regarding Claim 20, the combination of Win in view of Joshi discloses an analyzer wherein the previous accessed items and types of access include objects accessed (Col. 2, lines 31 – 33, the resources, Win; and Fig. 30, Page 17, [0193], lines 1 – 19, Joshi) and operations performed on the objects (Col. 2, lines 39 – 40, to use the resources, Win).

Regarding Claim 22, the combination of Win in view of Joshi discloses an analyzer wherein the memory comprises instructions (Figure 9, item 906, Col. 26, lines 8 – 12, Win), and the processor operates according to the instructions (Figure 9, item 904, Col. 26, lines 36 – 38, Win).

10. Claims 2, 11, 21, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Win et al. (Win hereinafter) (US Patent No. 6,182,142 B1, issued: January 30, 2001), in view of Joshi et al. (Joshi hereinafter) (US Patent Pub App. No. 2002/0091798 A1, filed: February 26, 2001), and further in view of Paulley et al. (Paulley hereinafter) (US Patent No. 6,665,664 B2).

⁶ Wherein the step of defining the roles corresponds to the step of developing a role claimed.

Regarding Claims 2, and 11, the combination of Win in view of Joshi discloses a article, wherein analyzing the issued database access statements comprises:

determining whether the plurality of database access statements have been captured (Figure 5B, item 516, Col. 10, lines 29 – 34, Win⁷);

The combination of Win in view of Joshi also discloses: normalizing the database access statements (Col.14, lines 15 – 17, Win) and eliminating redundancies in the database access statements (Col. 14, lines 15 – 19, Win).

However, the combination of Win in view of Joshi does not explicitly disclose: normalizing the captured database access statements; and eliminating redundancies in the normalized database access statements. On the other hand, Paulley discloses: normalizing the captured database access statements (Fig. 4A, item 401, 402, Col. 13, lines 34 – 44, Paulley); and eliminating redundancies in the normalized database access statements (Fig. 4A, item 403, 404, 405, Col. 14, lines 45 – 49, Paulley). It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the Paulley's teachings to the system of the combination of Win in view of Joshi. Skilled artisan would have been motivated to do so, as suggested by Paulley (Col. 8, lines 20 – 25, Paulley), to provide better optimization of the original SQL query without the system overhead that would result from full normalization. In addition, the applied references (Win, Joshi, and Paulley) teach features that are directed to analogous art and they are directed to the same field of endeavor, such as, databases

⁷ Wherein the step of recording a login attempt corresponds to the step of determining whether the database access statements have been captured as claimed. Specifically, the user's name and password correspond to the access statements claimed.

Application/Control Number: 10/736,001

Art Unit: 2162

management systems, normalization, and elimination of redundancies. This close relation between the applied references highly suggests an expectation of success.

Regarding Claim 21, the combination of Win in view of Joshi and further in view of Paulley discloses an analyzer wherein developing a role comprises:

determining whether the received database access statements have been captured (Figure 5B, item 516, Col. 10, lines 29 – 34, Win⁸);

normalizing the captured database access statements (Col. 14, lines 15 – 17, Win; and Fig. 4A, item 401, 402, Col. 13, lines 34 – 44, Paulley); and

eliminating redundancies in the normalized database access statements (Col. 14, lines 15 – 19, Win; and Fig. 4A, item 403, 404, 405, Col. 14, lines 45 – 49, Paulley).

Regarding Claims 23, the combination of Win in view of Joshi and further in view of Paulley discloses a method comprising:

capturing a plurality of database access statements that were issued for one or more applications during use (Figure 5B, item 516, Col. 10, lines 29 – 34, Win), wherein the database access statements comprise Structured Query Language (SQL) queries (Col. 7, lines 9 – 11, Win);

normalizing the captured database access statements (Col. 14, lines 15 – 17, Win; and Col. 14, lines 15 – 17, Win; and Fig. 4A, item 401, 402, Col. 13, lines 34 – 44, Paulley);

eliminating redundancies in the normalized database access statements (Col. 14, lines 15 – 19, Win; and Fig. 4A, item 403, 404, 405, Col. 14, lines 45 – 49, Paulley);

analyzing the normalized database access statements to determine previous accessed items and types of access for an application (Col. 2, lines 31 - 34, Win⁹; and Fig. 30, Page 17, [0193], lines 1 - 19, Joshi), wherein the previous accessed items and types of access include objects accessed (Col. 2, lines 31 - 33, the resources, Win; and Fig. 30, Page 17, [0193], lines 1 - 19, Joshi) and operations performed on the objects (Col. 2, lines 39 - 40, to use the resources, Win);

determining permissions for the application based on previous the accessed items and types of access for the application (Col. 3, lines 34 - 37, Win; and Fig. 30, Page 17, [0193], lines 1 - 19, Joshi);

developing a role for the application based on the previous determined permissions (Col. 2, lines 35 - 38, Win¹⁰);

determining which of a set of users are authorized to use the application (Col. 3, lines 13 – 14, Win);

detecting a user request to establish a session of the application (Figure 5B, item 516, Col. 10, lines 29 – 34, a login attempt, Win);

determining if the user is authorized to use the application (Col. 13, lines 34 – 36, Win);

⁸ Wherein the step of recording a login attempt corresponds to the step of determining whether the database access statements have been captured as claimed. Specifically, the user's name and password correspond to the access statements claimed.

correspond to the access statements claimed.

⁹ Wherein the resources correspond to the accessed items claimed; and the roles correspond to the type of access claimed.

of access claimed.
¹⁰ Wherein the step of defining the roles corresponds to the step of developing a role claimed.

Art Unit: 2162

if the user is authorized to use the application, finding the role for the application (Figure 5C, item 520 and 522, Col. 10, lines 57 – 63, Win);

assigning the role to the user (Col. 13, lines 32 – 34, Win);

detecting an end of the application session (Col. 9 and 10, lines 45 – 47 and 39 – 42; respectively, Win); and

if an end of the application session is detected (CoI. 10, lines 39 - 42, Win), disabling the assigned role for the user (CoI. 10, lines 42 - 45, Win).

Art Unit: 2162

Prior Art Made Of Record

1. Win et al. (US Patent No. 6,182,142 B1, issued: January 30, 2001) disclose a distributed access management of information resources.

- 2. Menninger (US Patent App. Pub. No. 2003/0069818 A1) discloses a system, method, and computer program product for creating contracts using a graphical user interface in a supply chain management framework.
- 3. Gold et al. (US Patent App. Pub. No. 2005/0102358 A1) discloses a web page monitoring and collaboration system.
- 4. Joshi et al. (US Patent Pub App. No. 2002/0091798 A1, filed: February 26, 2001).
- 5. Paulley et al. (US Patent No. 6,665,664 B2).

Art Unit: 2162

Points Of Contact

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Giovanna Colan whose telephone number is (571) 272-2752. The examiner can normally be reached on 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached on (571) 272-4107. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Giovanna Colan Examiner Art Unit 2162 June 4, 2007

> SANA AL-HASHEMI PRIMARY EXAMINER